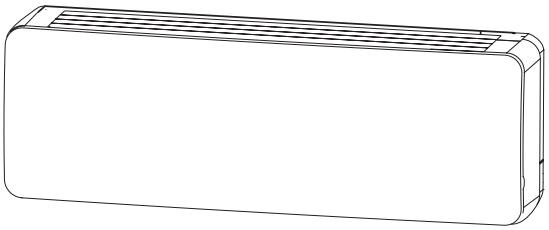
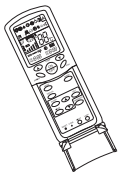
OPERATION MANUAL





HSU-12HQA03/R2(DB)

- Please read this operation manual before using the air conditioner

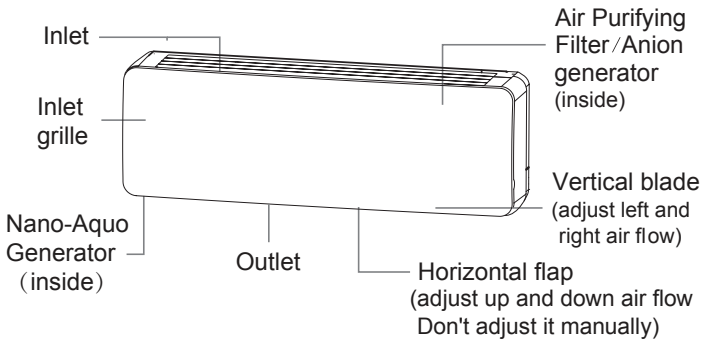
0010538206

Contents

Parts and functions 2
Operation 3
Maintenance 6
Cautions 7
Trouble shooting 8

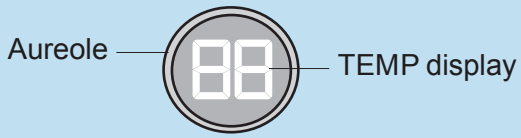
Parts and Functions

Indoor Unit


Inlet
Inlet grille
Air Purifying Filter/Anion generator (inside)
Vertical blade (adjust left and right air flow)
Nano-Aquo Generator (inside)
Outlet
Horizontal flap (adjust up and down air flow Don't adjust it manually)

Actual indoop unit may vary from the one shown in the manual, according to the product purchased.

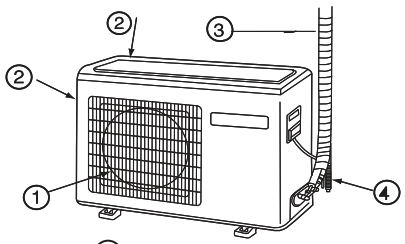
Display board



Display mode, the aureole display different colour when setting different function

COOL: blue	HEAT: red	FAN: yellow
AUTO: white	DRY: cyan	Nano-Aquo : green

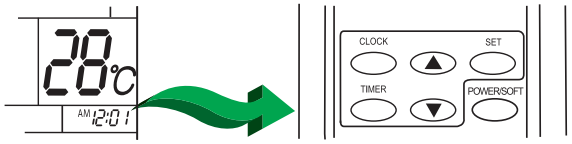
Outdoor Unit



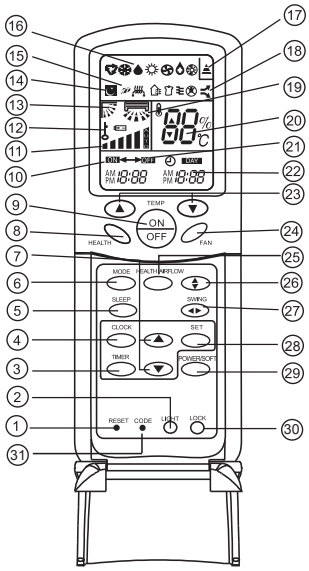
① OUTLET
② INLET
③ CONNECTING PIPING AND ELECTRICAL WIRING
④ DRAIN HOSE

Clock set

Press CLOCK button, "AM" or "PM" flashes.
Press△or▽to set correct time. Each press will increase or decrease 1min. If the button is kept pressed,time will change quickly. After time setting is confirmed,press SET, "AM "and "PM" stop flashing,while clock starts working.



Remote controller



1. RESET button
When the remote controller appears abnormal,use a sharp pointed article to press this button to reset the remote controller controller normal.
2.LIGHT button
Control the lightening and extinguishing of the indoor LED display board.
3. TIMER button
4. CLOCK button
5. SLEEP button
6. MODE button
7. HOUR button
8. HEALTH button
9. ON/OFF button
10. TIMER ON display
11. FAN SPEED display

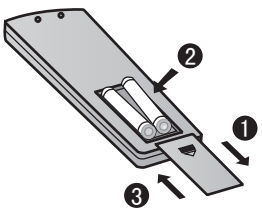
12. LOCK display
13. SWING display
14. SLEEP display
15. HEALTH display
16. Operation mode display

Operation mode	AUTO	COOL	DRY	HEAT	FAN
Remote controller					

17.Singal sending display
18. POWER/SOFT display
19. Left/right air flow display
20. TEMP display
21. TIMER OFF display
22. TIMER display
23. TEMP button
24. FAN SPEED button
25. HEALTH AIRFLOW button
26. SWING UP/DOWN button
27. SWING LEFT/RIGHT button
28. SET button
29. POWER/SOFT button
30. LOCK button
If pressed, the other buttons will be disabled. Press it once again, lock will be cancelled.
31.CODE
Used to select CODE A or B with a press, A or B will be displayed on LCD. Please select A without special explanation.

The following functions and related displays are not available: ㉛

Loading of the battery



1 Remove the battery cover;
2 Load the batteries as illustrated. 2 R-03 batteries, resetting key (cylinder);
3 Be sure that the loading is in line with the " + "/"-";
4 Load the battery,then put on the cover again.

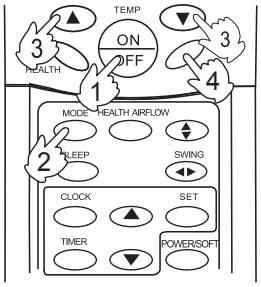
Note:
- The distance between the signal transmission head and the receiver hole should be within 7m without any obstacle as well.
- When electronic-started type fluorescent lamp or change-over type fluorescent lamp or wireless telephone is installed in the room, the receiver is apt to be disturbed in receiving the signals, so the distance to the indoor unit should be shorter.
- Full display or unclear display during operation indicates the batteries have been used up.Please change batteries.
- If the remote controller can't run normally during operation, please remove the batteries and reload several minutes later.

Hint:
Remove the batteries in case unit won't be in usage for a long period. If there are any display after taking-out, just need to press reset key.

Operation

Base Operation

Remote controller



1. Unit start

Press ON/OFF on the remote controller, unit starts.

2.Select operation mode

Press MODE button. For each press, operation mode changes as follows:

Remote controller:

3.Select temp.setting

Press ▼ / ▲ button

▲ Every time the button is pressed, temp.setting increase 1°C,if kept depressed, it will increase rapidly

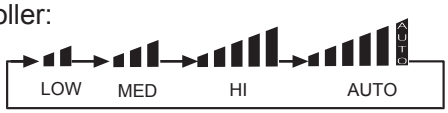
▼ Every time the button is pressed, temp.setting decrease 1°C,if kept depressed, it will decrease rapidly

Select a desired temperature.

4.Fan speed selection

Press FAN button. For each press, fan speed changes as follows:

Remote controller:



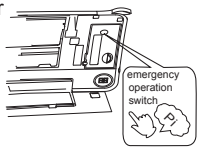
Air conditioner is running under displayed fan speed. When FAN is set to AUTO, the air conditioner automatically adjusts the fan speed according to room temperature.

Operation Mode	Remote Controller	Note
AUTO		Under the mode of auto operation, air conditioner will automatically select Cool or Heat operation according to room temperature. When FAN is set to AUTO, the air conditioner automatically adjusts the fan speed according to room temperature.
COOL		
DRY		In DRY mode, when room temperature becomes lower than temp.setting+2°C, unit will run intermittently at LOW speed regardless of FAN setting.
FAN		In FAN operation mode , the unit will not operate in COOL or HEAT mode but only in FAN mode , AUTO is not available in FAN mode. And temp. setting is disabled. In FAN mode, sleep operation is not available.
HEAT		

Emergency operation and test operation

Emergency Operation:

- Use this operation only when the remote controller is defective or lost.
- When the emergency operation switch is pressed,the" Pi "sound is heard once, which means the start of this operation.
- In this operation, the system automatically selects the operation modes,cooling or fan or heat, according to the room temperature.



Room temperature	Operation mode	Designated temperature	Timer mode	Air flow
ABOVE 24°C	COOLING	24°C	NO	AUTOMATIC
BELOW 24°C	HEAT	24°C	NO	AUTOMATIC

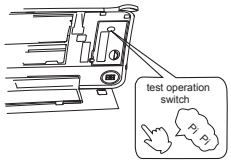
(cooling only uint) Room temperature	Operation mode	Designated temperature	Timer mode	Air flow
BELOW 24°C	FAN	24°C	NO	AUTOMATIC

- It is not possible to operate in dry mode.

Test operation:

Test operation switch is the same as emergency switch.

- Use this switch in the test operation when the room temperature is below 16°C, do not use it in the normal operation.
- Continue to press the test operation switch for more than 5 seconds. After you hear the "Pi" sound twice, release your finger from the switch: the cooling operation starts with the air flow speed "Hi".



Air Flow Direction Adjustment

1.Status display of air flow

Vertical flap

Pos.1 Pos.2 Pos.3

Pos.4 Pos.5 Pos.6 (Auto swing)

2.Left and right air flow adjustment

For each press of SWING button, remote controller displays as follows :

remote controller:

Pos.1 Pos.2 Pos.3 Pos.4

Pos.5 Pos.6 Pos.7 Pos.8

Cautions:

- When adjusting the flap by hand,turn off the unit.
- When humidity is high,condensate water might occur at air outlet if all vertical louvers are adjusted to left or right.
- It is advisable not to keep horizontal flap at downward position for a long time in COOLor DRY mode , otherwise, condensate water might occur.

Note:

When restart after remote turning off, the remote controller will automatically memorize the previous set swing position.

Operation

Sleep Operation

Before going to bed,you can simply press the SLEEP button and unit will operate in SLEEP mode and bring you a sound sleep.

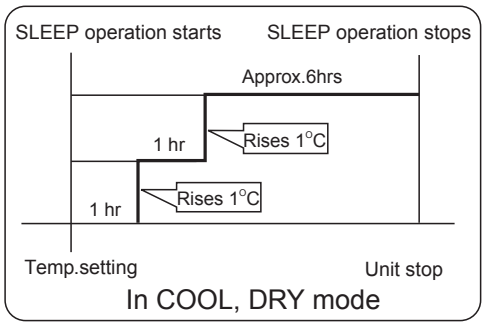
Use of SLEEP function

After the unit starts,set the operation status, then press SLEEP button before which the clock must be adjusted and time being set.

Operation Mode

1. In COOL,DRY mode

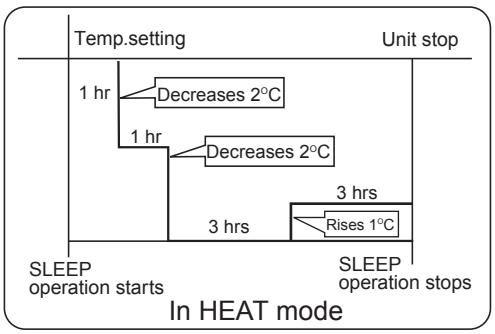
1 hours after SLEEP mode starts,temp.will become 1°C higher than temp.setting.After another 1 hours, temp.rises by 1°C futher.The unit will run for further 6 hours then stops Temp. is higher than temp. setting so that room temperature won't be too low for your sleep.



In COOL, DRY mode

2. In HEAT mode

1 hours after SLEEP mode starts,temp will become 2°C lower than temp.setting.After another 1 hours,temp decrease by 2°C futher.After more another 3hours,temp.rises by 1°C futher.The unit will run for further 3 hours then stops.Temp.is lower than temp. setting so that room temperature won't be too high for your sleep.



In HEAT mode

3. In AUTO mode

The unit operaters in corresponding sleep mode adapted to the automatically selected operation mode.

4. In FAN mode

It has no SLEEP function.

5.Set the wind speed change when sleeping

If the wind speed is high or middle before setting for the sleep, set for lowing the wind speed after sleeping.
If it is low wind, no change.

Note

When TIMER function is set, the sleeping function can't be set up .After the sleeping function is set up, if user resets TIMER function, the sleeping function will be cancelled;the machine will be in the state of timing-on.

POWER/SOFT Operation

(1) POWER Operation

When you need rapid heating or cooling, you can use this function. In COOL mode, fan speed automatically takes high speed of AUTO fan mode. In HEAT mode, fan speed automatically takes medial speed of AUTO fan mode.

(2) SOFT Operation

You can use this function when silence is needed for rest or reading. In SOFT operation mode, fan speed automatically takes low speed of AUTO fan mode.

Note：

During POWER operation, in rapid HEAT or COOL mode , the room will show inhomogeneous temperature distribution. Long period SOFT operation will cause effect of not too cool or not too warm.

To cancel POWER or SOFT operation
Press POWER/SOFT button again ,POWER or SOFT disappears.

Nano-Aquo Operation

Nano-Aquo generator adopt high voltage two poles to ionization the water molecule， produce plenty of positive and negative Ions， and realease these inos to the air to kill the bacterium.And meantime， because the negative ions qty more than positive ions qty， the Nano-Aquo generator also have the Negative ions generator function which can refresh the air.

Operation

Timer On/Off On-Off Operation

Set clock correctly before starting TIMER operation.

1.After unit starts, select your desired operation mode.

2.Press TIMER button to change TIMER mode. Every time the button is pressed, display changes as follows:
Remote controller:

Then select your desired TIMER mode (TIMER ON or TIMER OFF or TIMER ON-OFF). " ON "or " OFF "will flash.

3.Press TIME+ /TIME- button to set time.
It can be adjusted within 24 hours.

4.After setting correct time, press SET button to confirm " ON "or" OFF " on the remote controller stops flashing.

5.Cancel TIMER mode
Just press TIMER button several times until TIMER mode disappears.

Hints:

After replacing batteries or a power failure happens, time setting should be reset.
Remote controller possesses memory function,when use TIMER mode next time, just press SET button after mode selecting if time setting is the same as previous one.
According to the Time setting sequence of TIMER ON or TIMER OFF, either Start-Stop or Stop-Start can be achieved.

Healthy airflow Operation

1.Press ON/OFF to starting
Setting the comfort work conditions.

2.The setting of healthy airflow function
1).Press the button of healthy airflow， appears on the display. Horizontal airflow sending. Avoid the airflow blows direct to the body.

2).Press the button of healthy airflow again, appears on the display. Downward airflow sending. Avoid the airflow blows direct to the body.

3.The cancel of the healthy airflow function
Press the button of healthy airflow again, the unit goes on working under the condition before the setting of healthy airflow function.

Notice: Do not direct the flap by hand. Otherwise, the grille will run incorrectly. If the grille is not run correctly, stop for a minute and then start, adjusting by remote controller.

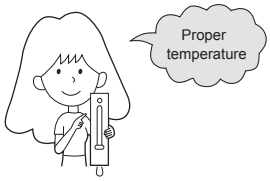
Note:

1.After setting the healthy airflow function, the position grill is fixed.
2.In heating, it is better to select the mode.
3.In cooling, it is better to select the mode.
4.In cooling and dry, using the air conditioner for a long time under the high air humidity, condensate water may occur at the grille .

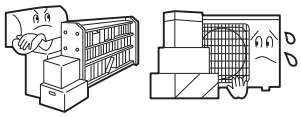
Maintenance

For Smart Use of The Air Conditioner

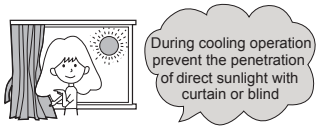
Setting of proper room temperature



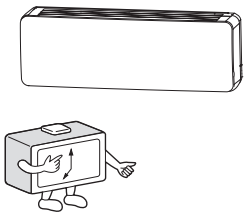
Do not block the air inlet or outlet



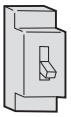
Close doors and windows during operation



Use the timer effectively



If the unit is not to be used for a long time, turn off the power supply main switch.



Use the louvers effectively

Remote Controller

Do not usewater,wipe the controller with a dry cloth.Do not use glass cleaner or chemical cloth.

Indoor Body

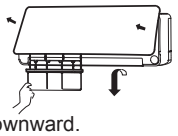
wipe the air conditioner by using a soft and dry cloth.For serious stains, use a neutral detergent diluted with water.Wring the water out of the cloth before wiping,then wipe off the detergent completely.

Do not use the following for cleaning

Gasoline,benzine, thinner or cleanser may damage the coating of the unit.

Hot water over 40°C(104°F) may cause discoloring or deformation.

Air Filter cleaning



1 Open the inlet grille by pulling it upward.

2 Remove the filter.
Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.

3 Clean the filter.
Use a vacuum cleaner to remove dust, or wash the filter with water.After washing, dry the filter completely in the shade.

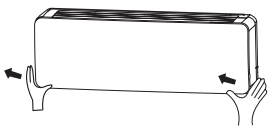
4 Attach the filter.
Attach the filter correctly so that the "FRONT" indication is facing to the front.Make sure that the filter is completely fixed behind the stopper.If the right and left filters are not attached correctly, that may cause defects.

5 Close the inlet grille.

Replacement of Air Purifying Filter

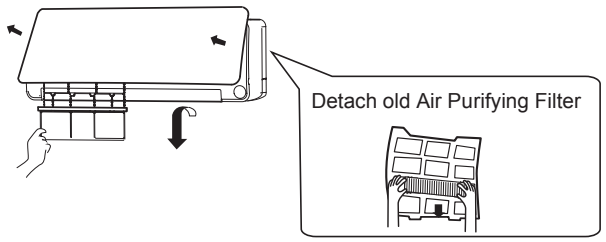
1.Open the Inlet Grille

Prop up the inlet grille by using a small device named grille-support which located in the right side of the indoor unit.



2.Detach the standard air filter

Slide the knob slightly upward to release the filter, then withdraw it.

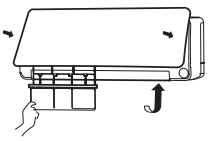


3.Attach Air Purifying Filter

Put air purifying filter appliances into the right and left filter frames.

4.Attach the standard air filter

(Necessary installation)



ATTENTION:

The white side of the photocatalyst air purifying filter face outside,and the black side face the unit The green side of the bacteria-killing medium air purifying filter face outside,and the white side face the unit.

5.Close the Inlet Grille

Close the Grille surely

NOTE:

- The photocatalyst air purifying filter will be solarized in fixed time. In normal family, it will be solarized every 6 months.
- The bacteria-killing medium air purifying filter will be used for a long time,no need for replacement. But in the period of using them ,you should remove the dust frequently by using vacuum cleaner or flaping them lightly,otherwise , its performance will be affected.
- Please keep the bacteria-killing medium air purifying filter in the cool and dry conditions avoid long time directly sunshine when you stop using it,or its ability of sterilization will be reduced.

Cautions

⚠ WARNING

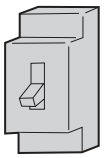
Please call Sales/Service Shop for the Installation.
Do not attempt to install the air conditioner by yourself because improper works may cause electric shock, fire, water leakage.

⚠ WARNING

When abnormality such as burnt-small found, immediately stop the operation button and contact sales shop.

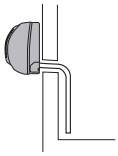
STRICT ENFORCEMENT

Use an exclusive power source with a circuit breaker



Check proper installation of the drainage securely

STRICT ENFORCEMENT



Connect power supply cord to the outlet completely

STRICT ENFORCEMENT

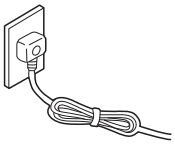
Use the proper voltage

STRICT ENFORCEMENT

1.Do not use power supply cord extended or connected in halfway
2.Do not install in the place where there is any possibility of inflammable gas leakage around the unit.
3.Do not get the unit exposed to vapor or oil steam.

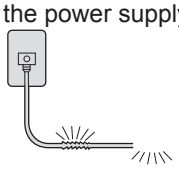
PROHIBITION

Do not use power supply cord in a bundle.



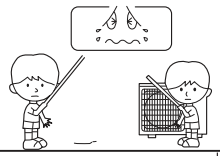
PROHIBITION

Take care not to damage the power supply cord.



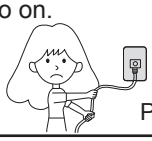
PROHIBITION

Do not insert objects into the air inlet or outlet.



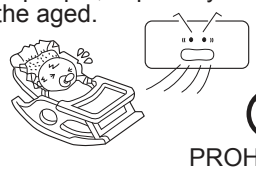
PROHIBITION

Do not start or stop the operation by disconnecting the power supply cord and so on.



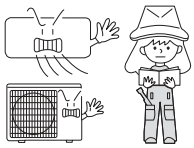
PROHIBITION

Do not channel the air flow directly at people, especially at infants or the aged.

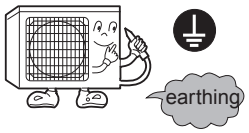


PROHIBITION

Do not try to repair or reconstruct by yourself.

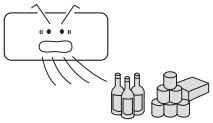


Connect the earth cable.



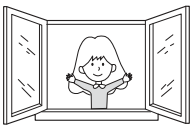
⚠ CAUTION

Do not use for the purpose of storage of food, art work, precise equipment, breeding, or cultivation.



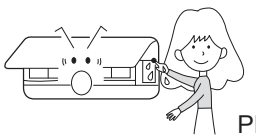
PROHIBITION

Take fresh air occasionally especially when gas appliance is running at the same time.



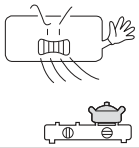
STRICT ENFORCEMENT

Do not operate the switch with wet hand.



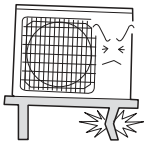
PROHIBITION

Do not install the unit near a fireplace or other heating apparatus.



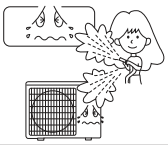
PROHIBITION

Check good condition of the installation stand



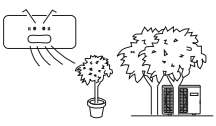
PROHIBITION

Do not pour water onto the unit for cleaning



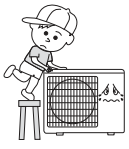
PROHIBITION

Do not place animals or plants in the direct path of the air flow



PROHIBITION

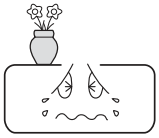
Do not place any objects on or climb on the unit.



PROHIBITION

Do not place flower vase or water containers on the top of the unit.

PROHIBITION



Trouble shooting

Before asking for service, check the following first.

	Phenomenon	Cause or check points
Normal Performance inspection	The system does not restart immediately.	• When unit is stopped, it won't restart immediately until 3 minutes have elapsed to protect the system. • When the electric plug is pulled out and reinserted, the protection circuit will work for 3 minutes to protect the air conditioner.
	Noise is heard	• During unit operation or at stop, a swishing or gurgling noise may be heard.At first 2-3 minutes after unit start, this noise is more noticeable. (This noise is generated by refrigerant flowing in the system.) • During unit operation, a cracking noise may be heard.This noise is generated by the casing expanding or shrinking because of temperature changes. • Should there be a big noise from air flow in unit operation, air filter may be too dirty.
	Smells are generated.	• This is because the system circulates smells from the interior air such as the smell of furniture, paint, cigarettes.
	Mist or steam are blown out.	• During COOL or DRY operation, indoor unit may blow out mist. This is due to the sudden cooling of indoor air.
	In dry mode,fan speed can't be changed.	• In DRY mode, when room temperature becomes lower than temp. setting+2 °C,unit will run intermittently at LOW speed regardless of FAN setting.
Multiple check		• Is power plug inserted? • Is there a power failure? • Is fuse blownout?
	Poor cooling	• Is the air filter dirty? Normally it should be cleaned every 15 days. • Are there any obstacles before inlet and outlet? • Is temperature set correctly? • Are there some doors or windows left open? • Is there any direct sunlight through the window during the cooling operation?(Use curtain) • Are there too much heat sources or too many people in the room during cooling operation?

Cautions

- Do not obstruct or cover the ventilation grille of the air conditoner.Do not put fingers or any other things into the inlet/outlet and swing louver.
- Do not allow children to play with the air conditioner.In no case should children be allowed to sit on the outdoor unit.

Specifications

- The refrigerating circuit is leak-proof.

The machine is adaptive in following situation

1.Applicable ambient temperature range:

Cooling	Indoor	Maximum:D.B/W.B	32°C/23°C
		Minimum:D.B/W.B	21°C/15°C
	Outdoor	Maximum:D.B/W.B	43°C/26°C
		Minimum: D.B	18°C
Heating	Indoor	Maximum:D.B	27°C
		Minimum: D.B	0°C
	Outdoor	Maximum:D.B/W.B	24°C/18°C
		Minimum:D.B/W.B	-7°C/-8°C
	Outdoor (INVERTER)	Maximum:D.B/W.B	24°C/18°C
		Minimum:D.B	-15°C

2. If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.

3.If the fuse of indoor unit on PC board is broken,please change it with the type of T. 3.15A/ 250V. If the fuse of outdoor unit is broken,change it with the type of T.25A/250V

4. The wiring method should be in line with the local wiring standard.

5. After installation, the power plug should be easily reached.

6. The waste battery should be disposed properly.

7. The appliance is not intended for use by young children or infirm persons without supervision.

8. Young children should be supervised to ensure that they do not play with the appliance.

9. Please employ the proper power plug, which fit into the power supply cord.

10. A breaker should be incorporated into fixed wiring. The breaker should be all-pole switch and the distance between its two contacts should be not less than 3mm.

11 .The power plug and connecting cable must have acquired the local attestation.

12.In order to protect the units,please turn off the A/C first, and at least 30 seconds later, cutting off the power.

13.Please don't insert any sensor on 3-waystop valve pipe fitting.

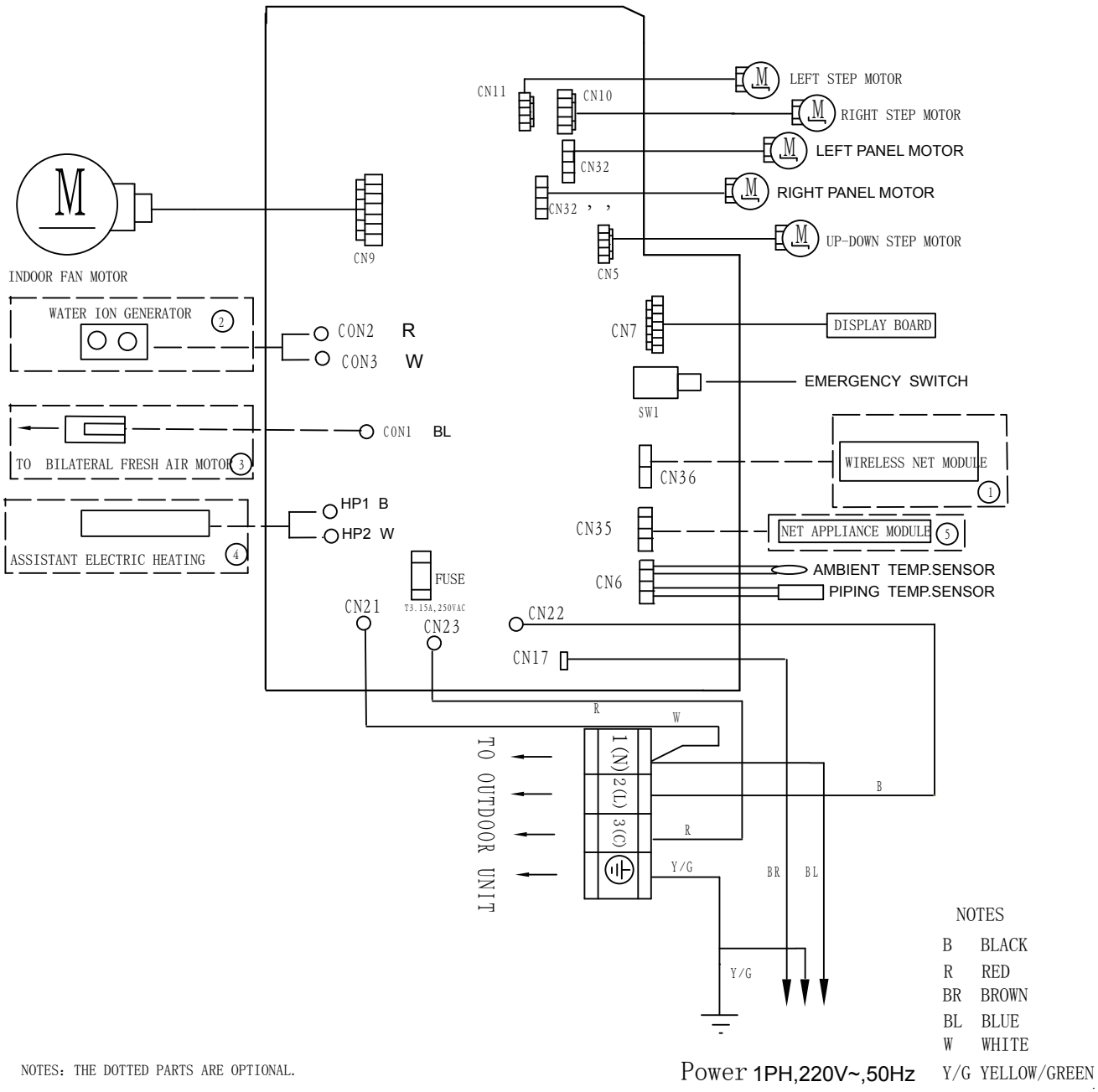
Specifications

	AIR-CONDITIONING
MODEL	HSU-12HQA03/R2(DB)
12 Months Gurantee	YES
Norminal cooling Capacity Hp	1
Power(W)	990
RATED CURRENT(A)	4.6
BTU	12000
VOLTAGE@50Hz(Nominal)	220
Refrigerant	R410A 1.01kg
Net Weight kg	indoor 10.8 /outdoor 34
Dimensions(Ht x Wx D) indoor	860 x 175 x 285
Dimensions(Ht x Wx D) outdoor	780 x 270 x 540
Speed Fan-VARIABLE SPEED	YES
Adjustable Thermostat	YES
"Auto swing" Air Direction	YES
Easy Clean Filter	YES
Remote Control Facility	YES
Builtto withstand Voltage Flunctuations	YES
Anti Electric Shock	CLASS I
Tropicalised	YES
Electrostatics Fliter	NO
Bacteria killing UV ray	NO

Note: All capacities are gross.
HAIER-THERMOCOOL reserves the right to change specifications as part of its policy of continuous improvement.

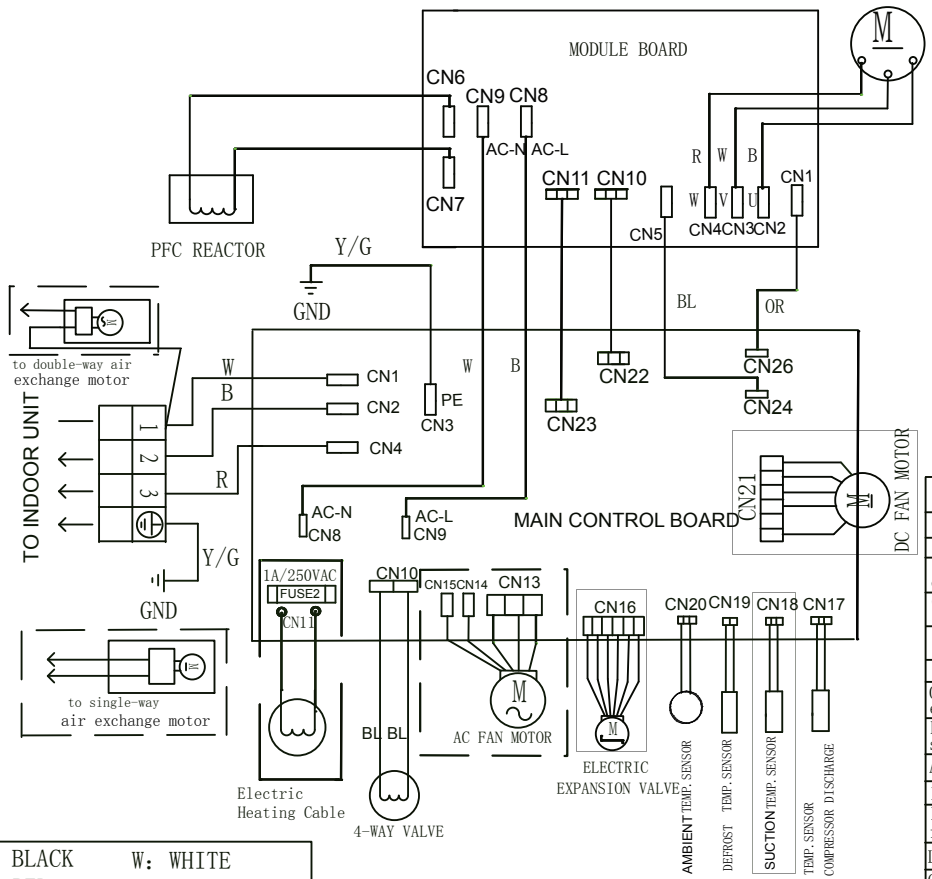
Electrical Diagram

12k wiring diagram of split unit indoor



Electrical Diagram

12k wiring diagram of split unit indoor



WARNING
CAUTION
DON'T TOUCH CAPACITOR, EVEN AFTER PLUG-OFF (DANGER OF ELECTRIC SHOCK) The capacitor retains high voltage even after the plug-off. For your safety, be sure to wait at least 5 minutes. after plug off and use a tester to confirm the voltage between connector P and N(on module board) is less than DC 10V before start servicing.

Description	LED1 Flash Times
Outdoor EEPROM error	1
The protection of IPM	2
Overcurrent protection of AC electricity	3
Communication fault between the IPM and CBD	4
Over pressure or Overheat protection for the compressor	5
Power voltage is too high or low	6
Overheat protection for exhaust temperature	8
Frost-removing temperature sensor failure	10
Ambient temperature sensor failure	12
Exhaust temperature sensor failure	13
Deviate from the normal for the compressor	18
Loop of the station detect error	19
Overcurrent of the compressor	24
Overcurrent protection for single-phase of the compressor	25

B: BLACK	W: WHITE
R: RED	Y/G: YELLOW/GREEN
BL: BLUE	OR: ORANGE

Remark: the dotted parts are optional for different unit.

Haier THERMOCOOL produce high quality air-conditioners,which are strong, reliable,elegantly styled-yet practical and long lasting for the most demanding tropical climate and conditions.

Haier THERMOCOOL new generation air-conditioners are convenient to use, highly efficient,energy saving and are built for quiet running to withstand voltage flunctuations.

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